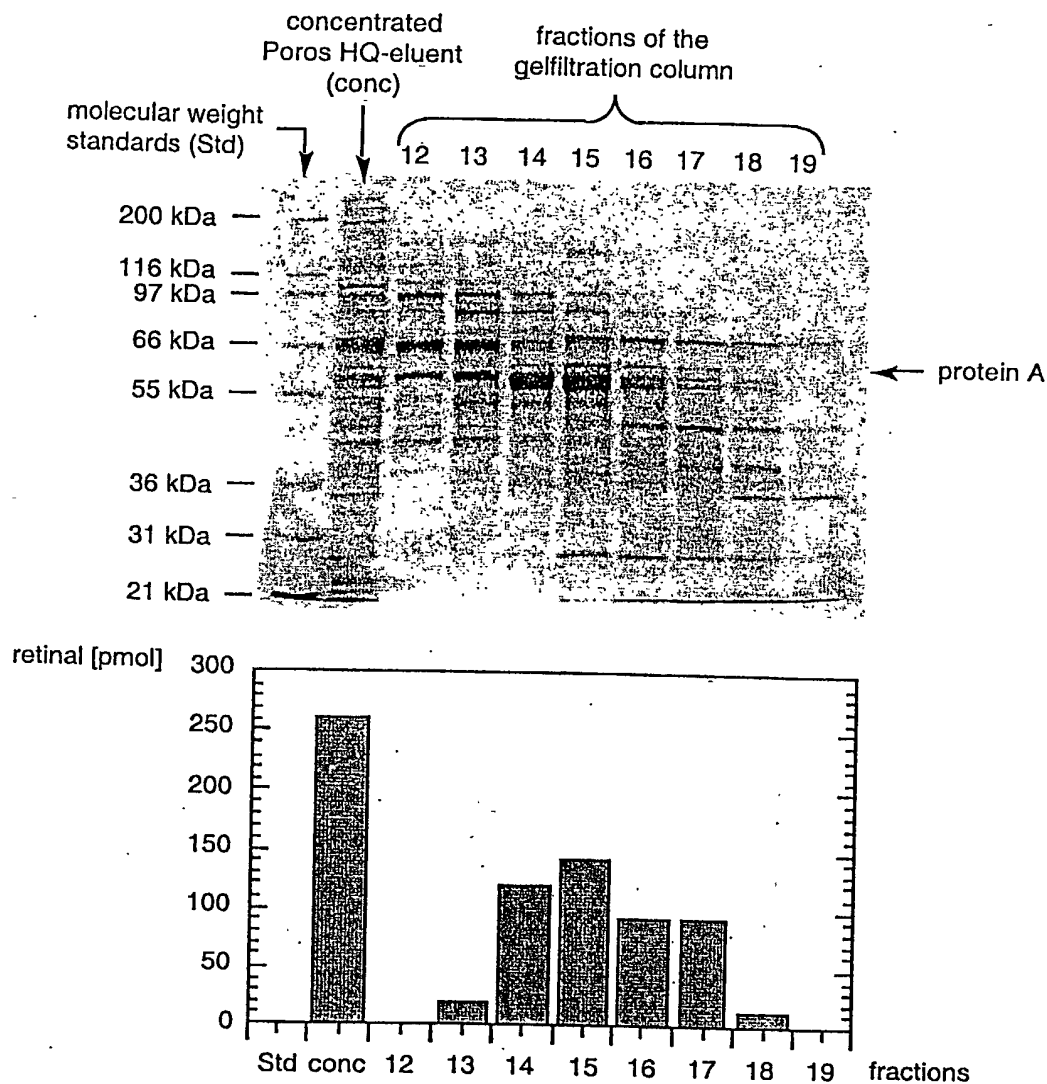




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Figure 1



A circular ink stamp from the Office of the Patent &amp; Trademark Office. The text "O I P E" is curved along the top inner edge, and "OFFICE OF THE PATENT &amp; TRADEMARK" is curved along the bottom inner edge. In the center, the date "OCT 03 2002" is stamped horizontally.

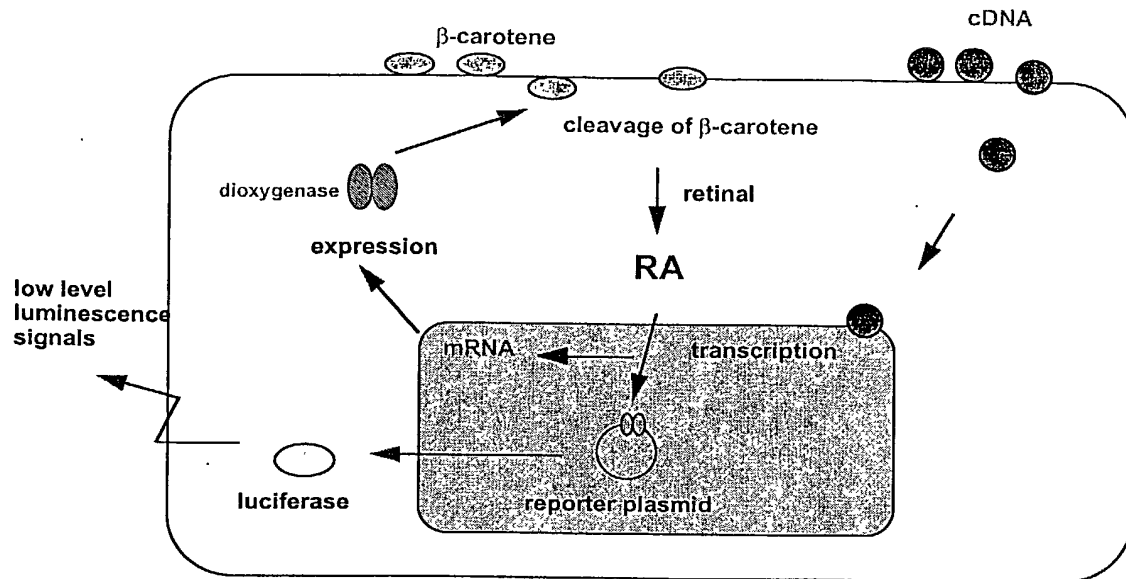


Figure 2



Seq. ID

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GTACGCCTGC

101 AGGAGCAGCT GGGTAGAGGA CACAGGAGAG CGATGGAGAC  
AATATTTAAC

151 AGAAACAAAG AAGAGCATCC AGAGCCCATATA AAAGCTGAGG  
TGCAAGGTCA

201 GTTGCCCACT TGGTTGCAAG GGGTACTTCT CCGAAATGGC  
CCAGGGATGC

251 ACACAATAGG GGACACTAAA TACAACCACT GGTTTGATGG  
CTTGGCTCTG

301 CTGCACAGCT TCACGTTTAA AAATGGTGAA GTTTACTACA  
GAAGTAAGTA

351 CCTCCGAAGT GACACATACA ACTGCAATAT AGAAGCAAAC  
CGAATCGTGG

401 TGTCTGAGTT TGGAACCATG GCTTATCCGG ATCCATGCAA  
AAACATATTT

451 GCCAAGGCAT TCTCATACTT ATCTCACACC ATTCTGAGT  
TCACGGACAA

501 CTGCCTGATC AACATTATGA AAAGTGGGGA TGATTATTAT  
GCTACCAAGT

551 AGACTAACTT CATCAGAAAA ATTGATCCAC AGACTCTGGA  
GACACTAGAT

601 AAGGTAGACT ACAGCAAATA TGTAGCTGTA AACTTGCGAA  
CTTCTCACCC

651 ACACTATGAC AGTGCTGGAA ATATTCTCAA CATGGGTACT  
TCAATTGTTG

701 ATAAAGGGAG AACAAAATAT GTTCTCTTTA AGATCCCTTC  
CTCTGTACCA

751 GAAAAAGAAA AGAAGAAATC TTGTTTTAAA CACCTGGAAG  
TAGTATGCTC

801 CATCCCTTCT CGCTCCCTGC TCCAACCAAG CTACTACCAC  
AGCTTTGGAA

851 TCACAGAAAA TTATATTGTG TTCATAGAGC AGCCATTTAA  
ACTGGATATT





2801 ACTGTCACCTT ACTATCGCCC CATCACATAA GAACAATGGG  
GCTTTGGTGA





1 111111 1 1111 1 111111

Figure 4  
No. 1

Seq. ID

1 METIFNRNKE EHPEPIKAEV QGQLPTWLQG VLLRNGPGMH  
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51 FDGLALLHSF TFKNGEVYR SKYLRSDTYN CNIEANRIVV  
SEFGTMAYPD

101 PCKNIFAKAF SYLSHTIPEF TDNCLINIMK TGDDYYATSE  
TNFIRKIDPQ

151 TLETLDKVDY SKYVAVNLAT SHPHYDSAGN ILMGTSIVD  
KGRTKYVLFK

201 IPSSVPEKEK KKSCFKHLEV VCSIPSRLL QPSYYHSFGI  
TENYIVFIEQ

251 PFKLDIVKLA TAYIRGVNWA SCLSFHKEDK TWFHFVDRKT  
KKEVSTKFYT

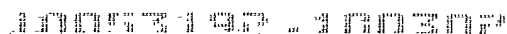
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KDFEVNNKLT

351 SIPTCKRFVV PLQYDKDAEV GSNLVKLPTS ATAVKEKDGS  
IYCQPEILCE

401 GIELPRVNYD YNGKKYKYVY ATEVQWSPVP TKIAKLVQOT  
KEVLHWGEDH

451 CWPSEPIFVP SPDAREEDEG VVLTCVVVSE PNKAPFLIL  
DAKTFKELGR

501 ATVNVEMHLD LHGMFIPQND LGAETE



Seq ID No. 4 and Seq ID No. 5

57 10 EEHPEPIKAEVQGQLPTWLQGVLLR..NGPGMHTIGDTKYNHWF DGLALL  
|| | : | | | . : | | | | | | | : | : | | | | | |  
69 20 EELSSPLTAHV TGRIP LWLTGSLRLRCFTGPGLFEVGSEPFYHLFDGQALL  
58 HSFTFKNGEVYYSKYLRSDTYNCNIEANRIVVSEFG..TMAYPDPCKNI  
| | | | | | | : : | . | | . | | | : . | | | | | : | | | | |  
105 70 HKFDFKEGHV TYHRRFIRTDAYVRAMTEKRIVITEFGFTTCAFPDPCKNI  
119  
155 106 FAKAFSYLSHTIPEFTDNCLINIMKTGDDYATSETNFIRKIDPQTLETI  
| . : | | | | | | | | : | : | : | | | | . | | | | | | . : | | | :  
167 120 FSRFFSYFRGV..EVDNALVNVPVVGEDYACTETNFITKINPETLETI  
156 ..DKVDYSKYVAVNLATSHPHYDSAGNILNMGTSIVDKGR TKYVLFKIPS  
| | | | | | | | . | : | . | | | | | : | | |  
203 168 FTKQVDLCNYVSVNGATAHPHIENDGTVYNIGNCFGKNFSIAYNIVKIPP  
217  
253 204 SVPEKEKKKSKCFKHLEVVC SIPSRLLQPSYYHSFGITENYIVFIEQPFK  
: | | | | | | : | | | . | | | | | : | | | | : | | |  
266 218 LQADKEDPISKFTS.EIVVQFP CSDRFKPSYVHSFGLTPNYIVFVETPVK  
254 LDIVKLATAY.IRGVNWASCL.SFHKEDK.TWFHFVDRKTKKEVSTKFYT  
: : | | : : | | : | | | | | : | | | . . | : |  
300 267 INLFKFLSSWSLWGANYMDCFESFTNETMGVWLHIADKKRKKYLNNKYRT  
316  
344 301 DALVLYHHINAYEEDGHVVF DIVAYRDN SL...YDMFYLKKLDKDFE...  
| : | | | | | : . | : : | : | | | | | | | | . . |  
366 317 SPFNLFHHINTYEDNGFLIVDLCCWKGF EFVYNYFTLYLANLRENWEEVK  
345 VNNKLT SIPTCKRFV VPLQYDKDAEVGSNLVKLP.TSATAV..KEKDGS I  
| : | | : : | . | | | | : | | | | | | | : . . |  
415 367 KNARKAPQPEVRRYV LPLNIDK.ADTGKNLVTL PNTTATAILCSDEFTTI  
392 YCQPEILCEG....IELPRVNYD.YNGKKYKYVYATEVQWSPVPTKIAKL  
: : | | : | | | : | | | | | | | | | | : : | |  
436 416 WLEPEVL FSGPRQAF EFPQIN YQKYCGKPYTYAYGLGLNHF.VPDRLCKL  
464





1000531932 1000302

437 NVQTKEVLH..WGEDHCWPSEPIFVPSPDAREEDEGVVLTVCVVVSEP NKA  
484     ||.|||     | |     : |||||     |||     |||: ||||. ||  
465 NVKTKETWFTVWQEPDSEPIFVSHPDAL EDDGVVLSVVVSPGAGQK  
514  
485 P.FLLILDAKTFKELGRA..TVNVEMHLDLHGMF 515  
   | : ||||. ||     |. ||     || : . .     ||: |  
515 PAYLLILNAKDLSEVARAEFTVEINIPVTFHGLF 548

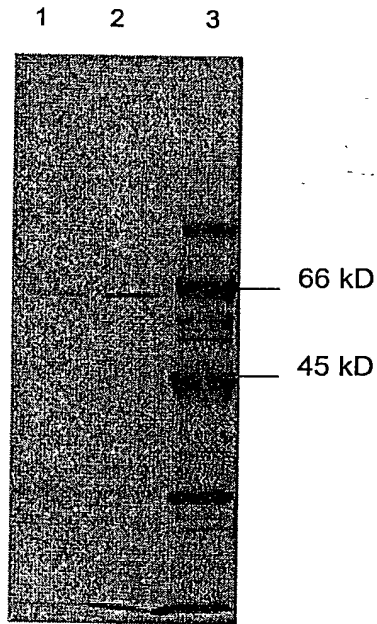


Fig. 6



1.0057147 1.0003012

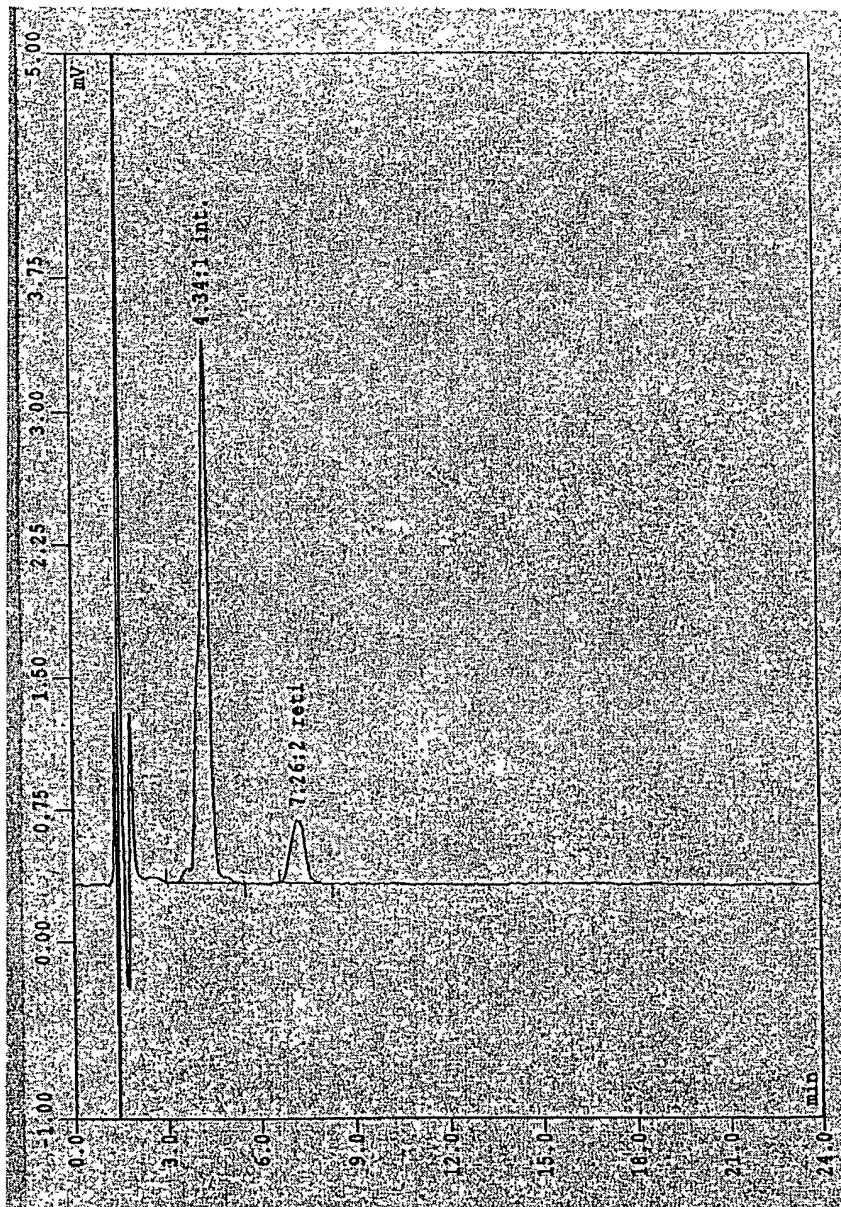


Fig. 7



10053192 100302

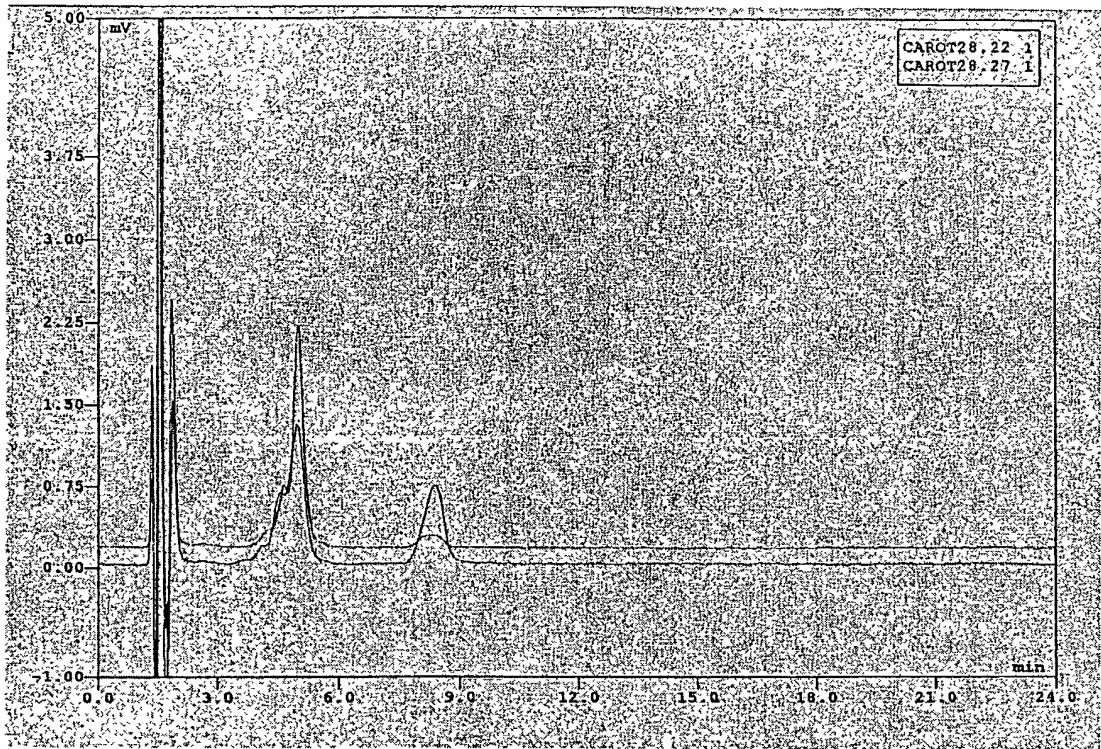
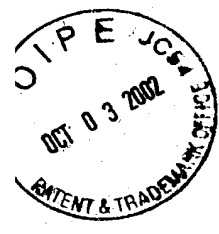


Fig. 8